1 <110> APPLICANT: Hillman, Jennifer L.; Lal, Preeti G.;

PATENT APPLICATION: US/09/892,287

DATE: 03/27/2003 TIME: 12:39:41

Input Set : A:\pf03342div substitute sequence listing.txt

Output Set: N:\CRF4\03272003\I892287.raw

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Corley, Neil C.; Shah, Purvi
 4 <120> TITLE OF INVENTION: ANTIBODIES TO A HUMAN PHOSPHATIDYLINOSITOL 4,5-BISPHOSPHATE
         PHOSPHATASE (As amended)
 7 <130> FILE REFERENCE: PF-0334-2 DIV
 9 <140> CURRENT APPLICATION NUMBER: 09/892,287
10 <141> CURRENT FILING DATE: 2001-06-26
12 <150> PRIOR APPLICATION NUMBER: US 09/258,643
13 <151> PRIOR FILING DATE: 1999-02-26
15 <150> PRIOR APPLICATION NUMBER: US 08/884,681
16 <151> PRIOR FILING DATE: 1997-06-27
18 <160> NUMBER OF SEQ ID NOS: 5
19 <170> SOFTWARE: PERL Program
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 372
23 <212> TYPE: PRT
24 <213> ORGANISM: Homo sapiens
26 <220> FEATURE:
27 <221> NAME/KEY: misc feature
28 <223> OTHER INFORMATION: Incyte ID No: 638789CD1
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33 Arg Met Gln Gly Ile Leu Leu Leu Val Phe Ala Lys Tyr Gln His
                                         25
                    \cdot 20
35 Leu Pro Tyr Ile Gln Ile Leu Ser Thr Lys Ser Thr Pro Thr Gly
                                         40
37 Leu Phe Gly Tyr Trp Gly Asn Lys Gly Gly Val Asn Ile Cys Leu
38
                    50
39 Lys Leu Tyr Gly Tyr Tyr Val Ser Ile Ile Asn Cys His Leu Pro
40
                    65
41 Pro His Ile Ser Asn Asn Tyr Gln Arg Leu Glu His Phe Asp Arg
                                                             90
                    80
                                         85
43 Ile Leu Glu Met Gln Asn Cys Glu Gly Arg Asp Ile Pro Asn Ile
                    95
                                        100
45 Leu Asp His Asp Leu Ile Ile Trp Phe Gly Asp Met Asn Phe Arg
                   110
                                        115
47 Ile Glu Asp Phe Gly Leu His Phe Val Arg Glu Ser Ile Lys Asn
                                        130
48
                   125
49 Arg Cys Tyr Gly Gly Leu Trp Glu Lys Asp Gln Leu Ser Ile Ala
                   140
                                        145
51 Lys Lys His Asp Pro Leu Leu Arg Glu Phe Gln Glu Gly Arg Leu
                   155
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RAW SEQUENCE LISTING PATENT APPLICATION: US/09/892,287 DATE: 03/27/2003 TIME: 12:39:41

Input Set: A:\pf03342div_substitute sequence listing.txt
Output Set: N:\CRF4\03272003\I892287.raw

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53 Leu Phe Pro Pro Thr Tyr Lys Phe Asp Arg Asn Ser Asn Asp Tyr
                   170
                                        175
55 Asp Thr Ser Glu Lys Lys Arg Lys Pro Ala Trp Thr Asp Arg Ile
                   185
                                       190
57 Leu Trp Arg Leu Lys Arg Gln Pro Cys Ala Gly Pro Asp Thr Pro
                   200
                                        205
                                                            210
59 Ile Pro Pro Ala Ser His Phe Ser Leu Ser Leu Arg Gly Tyr Ser
                                        220
61 Ser His Met Thr Tyr Gly Ile Ser Asp His Lys Pro Val Ser Gly
                                        235
                   230
63 Thr Phe Asp Leu Glu Leu Lys Pro Leu Val Ser Ala Pro Leu Ile
                   245
64
65 Val Leu Met Pro Glu Asp Leu Trp Thr Val Glu Asn Asp Met Met
                                                            270
                                        265
                   260
67 Val Ser Tyr Ser Ser Thr Ser Asp Phe Pro Ser Ser Pro Trp Asp
                   275
                                        280
68
69 Trp Ile Gly Leu Tyr Lys Val Gly Leu Arg Asp Val Asn Asp Tyr
                                                            300
                   290
                                        295
71 Val Ser Tyr Ala Trp Val Gly Asp Ser Lys Val Ser Cys Ser Asp
                   305
                                        310
73 Asn Leu Asn Gln Val Tyr Ile Asp Ile Ser Asn Ile Pro Thr Thr
                                                            330
                   320
                                        325
75 Glu Asp Glu Phe Leu Leu Cys Tyr Tyr Ser Asn Ser Leu Arg Ser
                   335
                                        340
77 Val Val Gly Ile Ser Arg Pro Phe Gln Ile Pro Pro Gly Ser Leu
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                                        355
79 Arg Glu Asp Pro Leu Gly Glu Ala Gln Pro Gln Ile
                   365
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83 <211> LENGTH: 2573
84 <212> TYPE: DNA
85 <213> ORGANISM: Homo sapiens
87 <220> FEATURE:
88 <221> NAME/KEY: misc feature
89 <223> OTHER INFORMATION: Incyte ID No: 638789CB1
91 <400> SEQUENCE: 2
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93 cagtgacctg cttcagctga acaaccggaa cctcaatctt gacatatatg ttattggttt 120
94 gcaggaattg aactctggga tcataagcct cettteegat getgeettta atgaetegtg 180
95 gagcagtttc ctcatggatg tgctttcccc tctgagcttc atcaaggtct cccatgtccg 240
96 tatgcagggg atcctcttac tggtctttgc caagtatcag catttgccct atatccagat 300
97 tctgtctact aaatccaccc ccactggcct gtttgggtac tgggggaaca aaggtggagt 360
98 caacatetge etgaagettt atggetaeta tgteageate ateaaetgee acetgeetee 420
99 ccacatttcc aacaattacc agcggctgga gcactttgac cggatcctgg agatgcagaa 480
100 ttgtgagggg cgagacatcc caaacatcct ggaccacgac ctcattatct ggtttggaga 540
101 catgaacttt cggatcgagg actttgggtt gcactttgtt cgggaatcca ttaaaaatcg 600
102 gtgctacggt ggcctgtggg agaaggacca gctcagcatt gccaagaaac atgacccgct 660
103 gctccgggag ttccaggagg gccgcctact cttcccgccc acctacaagt ttgataggaa 720
104 ctccaacgac tatgacacca gtgagaaaaa acgcaagcct gcatggaccg atcgcatcct 780
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PATENT APPLICATION: US/09/892,287

Input Set : A:\pf03342div substitute sequence listing.txt

DATE: 03/27/2003 TIME: 12:39:41

Output Set: N:\CRF4\03272003\I892287.raw 105 gtggaggetg aageggeage cetgtgetgg eecegacaet eecatacege eggegteaca 840 106 cttctccttg tctctgaggg gctacagcag ccacatgacg tacggcatca gcgaccacaa 900 107 gcctgtctcc ggcacgttcg acttggagct gaagccattg gtgtctgctc cgctgatcgt 960 108 cctgatgccc gaggacctgt ggaccgtgga aaatgacatg atggtcagct actcttcaac 1020 109 ctcggacttc cccagcagcc cgtgggactg gattggactg tacaaggtgg ggctgcggga 1080 110 cgttaatgac tacgtgtcct atgcctgggt cggggacagc aaggtctcct gcagcgacaa 1140 111 cctgaaccag gtttacatcg acatcagcaa tatccctacc actgaagatg agtttctcct 1200 112 ctgttactac agcaacagtc tgcgttctgt ggtggggata agcagaccct tccagatccc 1260 113 gcctggctcc ttgagggagg acccactggg tgaagcacag ccacagatct gagccaggat 1320 114 gggagtgaat cccaggcgga ggccagagct ggcagccagc tctgcctttc cactgccggg 1380 115 agtgctgggg gcccagcctg gccccctgaa gagacagcca agtgtcgtcc acatactcct 1440 116 cccagagtga gctctaacca ggctcatttg ctctctccac tactcatctc tggaattagc 1500 117 cgcttaaata caggtttttg ttgctgagat gtgagtgaaa ccagctagtg tgtcaacagt 1560 118 gaagacctgg ggacagttct gcgtctcatt tctggattcc taccccctct tctagtcttg 1620 119 cccaagtagt cctgccaggc acatgcccca tttggcacag gcctgcattc ttgtcgtgcc 1680 120 gtcctgggcc tcaggctgtc tgggagggga gatgctcaca tttgtacagg ctacatagac 1740 121 tggtgcaagc agtgctggat tccaggagtc ttggcatctc atagcttgtc cccgtgagga 1800 122 qtqaqcaqaq qqtctqqqat ttctqctttc aqcaaaagca gtctgactca gtgggcagaa 1860 123 tggaggggcc cctctagcca ggctcttacg ccatggttat gagcaggttg atgagggtcc 1920 124 ttcggccage acaacettee tecetaetea eggeatggag tetgaetgea tggaagttee 1980 125 agatectgae agagagaact gggaaggate eaggtteget teegttggta gettgagtee 2040 126 catqcctcca ccctqccatc tgaggaaggg gtgacaagtg gtcaaggagc tgtggccaca 2100 127 gacttttcca gggtggtcct tggcaggtga ggtgcgtctg tgccaccctt gtcaggagtc 2160 128 attgacgacg ggcccccct ggacccccc ggacctcaga gtgggggcag gcagaaggga 2220 129 gaaccagete aagacatttt ggaggatetg geeetggggt tetteagaga acaceeteta 2280 130 ggggctttgg ggacatggcc tgtccccaca tccagcactt gcctccgcca tggtcactcg 2340 131 gcaqcccttt tcccaggaga agacacctct gggagcctgc tcagtgcttg tcctgccatc 2400 132 ctgtgtcctg ggactgaggg ttactccagt tgctctgtgt tgcatactct cccccgcaag 2460 133 cctgtgtatg aagaattgtc ccctggcttc cagcaggcca tggctggctg ttttgtgact 2520 134 gttacattgt gcaggggtaa ttattagcgt ggcttttaca cttaaaaaaa aaa 136 <210> SEQ ID NO: 3 137 <211> LENGTH: 397 138 <212> TYPE: PRT 139 <213> ORGANISM: Homo sapiens 141 <220> FEATURE: 142 <221> NAME/KEY: misc feature 143 <223> OTHER INFORMATION: GenBank ID No: g1399105 145 <400> SEQUENCE: 3 146 Ala Arg Gly Leu His Phe Val Lys Phe Ala Ile Asp Ser Asp Gln 10 148 Leu His Gln Leu Trp Glu Lys Asp Gln Leu Asn Met Ala Lys Asn 150 Thr Trp Pro Ile Leu Lys Gly Phe Gln Glu Gly Pro Leu Asn Phe 151 152 Ala Pro Thr Phe Lys Phe Asp Val Gly Thr Asn Lys Tyr Asp Thr 50 55 154 Ser Ala Lys Lys Arg Lys Pro Ala Trp Thr Asp Arg Ile Leu Trp

156 Lys Val Lys Ala Pro Gly Gly Gly Pro Ser Pro Ser Gly Arg Lys

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Input Set : A:\pf03342div_substitute sequence listing.txt
Output Set: N:\CRF4\03272003\I892287.raw

DATE: 03/27/2003

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90
157
                                          85
158 Ser His Arg Leu Gln Val Thr Gln His Ser Tyr Arg Ser His Met
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                     95
160 Glu Tyr Thr Val Ser Asp His Lys Pro Val Ala Ala Gln Phe Leu
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                                         115
162 Leu Gln Phe Ala Phe Arg Asp Asp Met Pro Leu Val Arg Leu Glu
                                         130
                                                              135
                    125
164 Val Ala Asp Glu Trp Val Arg Pro Glu Gln Ala Val Val Arg Tyr
                                         145
165
166 Arg Met Glu Thr Val Phe Ala Arg Ser Ser Trp Asp Trp Ile Gly
167
168 Leu Tyr Arg Val Gly Phe Arg His Cys Lys Asp Tyr Val Ala Tyr
                                         175
                    170
170 Val Trp Ala Lys His Glu Asp Val Asp Gly Asn Thr Tyr Gln Val
                                         190
                    185
172 Thr Phe Ser Glu Glu Ser Leu Pro Lys Gly His Gly Asp Phe Ile
                                         205
                    200
174 Leu Gly Tyr Tyr Ser His Asn His Ser Ile Leu Ile Gly Ile Thr
                                         220
175
                    215
176 Glu Pro Phe Gln Ile Ser Leu Pro Ser Ser Glu Leu Ala Ser Ser
                                         235
                    230
178 Ser Thr Asp Ser Ser Gly Thr Ser Ser Glu Gly Glu Asp Asp Ser
                                         250
180 Thr Leu Glu Leu Leu Ala Pro Lys Ser Arg Ser Pro Ser Pro Gly
                    260
                                         265
182 Lys Ser Lys Arg His Arg Ser Arg Ser Pro Gly Leu Ala Arg Phe
                                                              285
183
184 Pro Gly Leu Ala Leu Arg Pro Ser Ser Arg Glu Arg Arg Gly Ala
                                         295
                    290
186 Ser Arg Ser Pro Ser Pro Gln Ser Arg Arg Leu Ser Arg Val Ala
                                         310
                    305
188 Pro Asp Arg Ser Ser Asn Gly Ser Ser Arg Gly Ser Ser Glu Glu
                    320
                                         325
190 Gly Pro Ser Gly Leu Pro Gly Pro Trp Ala Phe Pro Pro Ala Val
                    335
                                         340
191
192 Pro Arg Ser Leu Gly Leu Leu Pro Ala Leu Arg Leu Glu Thr Val
                    350
                                         355
194 Asp Pro Gly Gly Gly Ser Trp Gly Pro Asp Arg Glu Ala Leu
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196 Ala Pro Asn Ser Leu Ser Pro Ser Pro Gln Gly His Arg Gly Leu
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198 Glu Glu Gly Gly Leu Gly Pro
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201 <210> SEQ ID NO: 4
202 <211> LENGTH: 942
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <220> FEATURE:
207 <221> NAME/KEY: misc feature
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Input Set: A:\pf03342div substitute sequence listing.txt Output Set: N:\CRF4\03272003\I892287.raw

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                                          40
217 Cys Val Ile Ala Val Gln Gly Val Leu Cys Glu Gly Asp Ser Arg
219 Gln Ser Arg Leu Leu Gly Leu Val Arg Tyr Arg Leu Glu His Gly
                     65
220
221 Gly Gln Glu His Ala Leu Phe Leu Tyr Thr His Arg Arg Met Ala
                     80
                                         85
223 Ile Thr Gly Asp Asp Val Ser Leu Asp Gln Ile Val Pro Val Ser
                                        100
                     95
225 Arg Asp Phe Thr Leu Glu Glu Val Ser Pro Asp Gly Glu Leu Tyr
                    110
                                         115
227 Ile Leu Gly Ser Asp Val Thr Val Gln Leu Asp Thr Ala Glu Leu
                                         130
                    125
229 Ser Leu Val Phe Gln Leu Pro Phe Gly Ser Gln Thr Arg Met Phe
                    140
                                         145
231 Leu His Glu Val Ala Arg Ala Cys Pro Gly Phe Asp Ser Ala Thr
                    155
                                         160
232
233 Arg Asp Pro Glu Phe Leu Trp Leu Ser Arg Tyr Arg Cys Ala Glu
234
235 Leu Glu Leu Glu Met Pro Thr Pro Arg Gly Cys Asn Ser Ala Leu
                                         190
236
                    185
237 Val Thr Trp Pro Gly Tyr Ala Thr Ile Gly Gly Gly Ser Asn
                    200
                                         205
239 Phe Asp Gly Leu Arg Pro Asn Gly Lys Gly Val Pro Met Asp Gln
                                         220
                    215
241 Ser Ser Arg Gly Gln Asp Lys Pro Glu Ser Leu Gln Pro Arg Gln
                    230
                                         235
243 Asn Lys Ser Lys Ser Glu Ile Thr Asp Met Val Arg Ser Ser Thr
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                                         250
245 Ile Thr Val Ser Asp Lys Ala His Ile Leu Ser Met Gln Lys Phe
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                                         265
247 Gly Leu Arg Asp Thr Ile Val Lys Ser His Leu Leu Gln Lys Glu
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                    275
249 Glu Asp Tyr Thr Tyr Ile Gln Asn Phe Arg Phe Phe Ala Gly Thr
                                         295
250
                    290
251 Tyr Asn Val Asn Gly Gln Ser Pro Lys Glu Cys Leu Arg Leu Trp
                                                             315
                                         310
                    305
253 Leu Ser Asn Gly Ile Gln Ala Pro Asp Val Tyr Cys Val Gly Phe
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                                         325
255 Gln Glu Leu Asp Leu Ser Lys Glu Ala Phe Phe Phe His Asp Thr
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257 Pro Lys Glu Glu Glu Trp Phe Lys Ala Val Ser Glu Gly Leu His
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VERIFICATION SUMMARY

DATE: 03/27/2003

PATENT APPLICATION: US/09/892,287

TIME: 12:39:42

Input Set : A:\pf03342div_substitute sequence listing.txt Output Set: $\dot{N}:\CRF4\03272003\I892287.raw$